

PERMIT APPLICATION: NRS 07-161

APPLICANT: Mike Teske
The Dollywood Company
1020 Dollywood Lane
Pigeon Forge, TN 37863-4101
(865) 428-9457

LOCATION: Unnamed tributaries to Middle Creek; Dollywood Theme Park; northwest of Pigeon Forge, Sevier County.

WATERSHED DESCRIPTION: Lower French Broad River Watershed (HUC 06010107). Subject property is surrounded by wooded hills and the Dollywood Theme Park. Three unnamed headwater tributaries to Middle Creek exist on the subject property. All appear to be intermittent Tier 1 streams. Stream 1 is in a well-defined channel with rock/bedrock substrate from where it enters the proposed fill area from the upstream culver for approximately 200 feet downstream. At this point flow goes subsurface until it enters the downstream culvert. Stream-2 is a shallow channel that flows across shale outcrops on the east side of an access road and was apparently created as a ditch to drain the road. Stream -3 is also incised and flows over exposed shale outcrops before draining into Stream-2.

PROJECT DESCRIPTION: The applicant proposes to expand the existing theme park that will require the encapsulation of 264 linear feet of Stream-1. The encapsulation will be accomplished by connecting similar sized reinforced concrete pipes (RCP) to the existing culverts at the northeast and southeast train loop crossings. Construction will be conducted in the dry by use of a diversion channel. Excavation in the vicinity of stream 2 and stream 3 will require the combination and reconstruction of the two channels into one which historically was one stream prior to the construction of the access road which split it into two channels. The new channel will be in the general location as is stream-2 but lower in elevation and slightly steeper grade. Native vegetation will be planted to provide a stream canopy. The new channel will be monitored for five years with annual reports submitted to this office.

Compensatory mitigation for the encapsulation of 264 linear feet of Stream-1 will be through the payment of \$200/linear foot to the Tennessee Stream Mitigation Program.

USGS TOPOGRAPHIC QUADRANGLE: **PIGEON FORGE 156 SE**
35.7956 N; -83.5255 W

PERMIT COORDINATOR: Mike Lee

More details on the proposal can be viewed on the internet at
<http://www.state.tn.us/environment/wpc/ppo/arap>.

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No decision has been made whether to issue or deny this permit. The purpose of this notice is to inform interested parties of this permit application and to ask for comments and information necessary to determine possible impacts to water quality. Persons wishing to comment on the

proposal are invited to submit written comments to the department. Written comments must be received within **thirty days of the date that this notice is posted**. Comments will become part of the record and will be considered in the final decision. The applicant's name and permit number should be referenced.

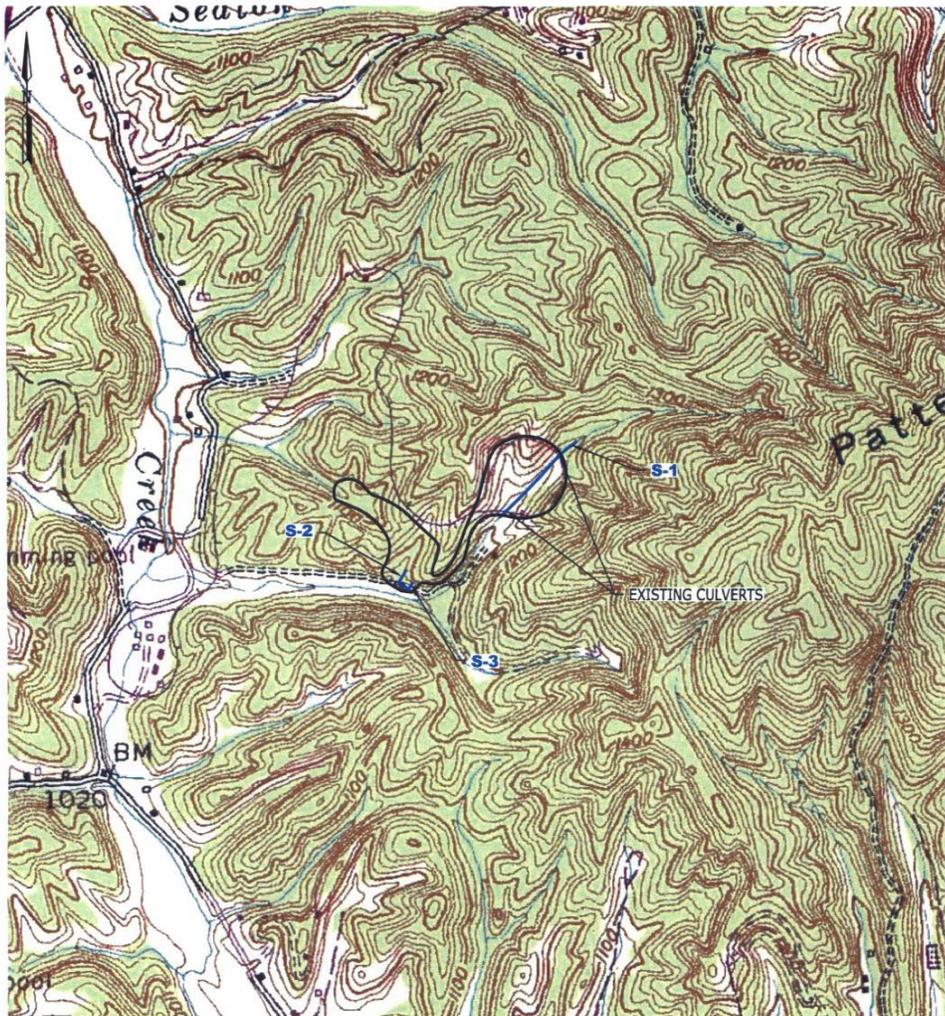
Interested persons may also request in writing that the department hold a public hearing on this application. The request must be filed within the comment period, indicate the interest of the person requesting it, the reasons that the hearing is warranted, and the water quality issues being raised. When there is sufficient public interest in water quality issues, the department will hold a public hearing.

The permit application, supporting documentation including detailed plans and maps, and related comments are available at the department's address for review and/or copying. The department's address is:

Tennessee Department of Environment & Conservation
Division of Water Pollution Control, Natural Resources Section
7th Floor L & C Annex
401 Church Street
Nashville, TN 37243

In deciding whether to issue or deny a permit, the department will consider all comments on record and the requirements of applicable federal and state laws.

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SOURCE: USGS TOPOGRAPHIC MAP OF THE PIGEON FORGE, TN QUADRANGLE 156 SE



MACTEC Engineering and Consulting, Inc.
 1725 Louisville Drive
 Knoxville, Tennessee 37921-5904
 865-588-8544 • Fax: 865-588-8026

**FIGURE 1: SITE LOCATION MAP
 TRAIN LOOP PROJECT
 PIGEON FORGE, TENNESSEE**

DRAFTING BY: <i>RSS</i>	PREPARED BY: <i>MWB</i>	CHECKED BY: <i>ML</i>
JOB NUMBER: 3079070022/0001	DATE: MAY 11, 2007	SCALE: 0 1000'

COORDINATES: N XXXXXXX
 W XXXXXXX



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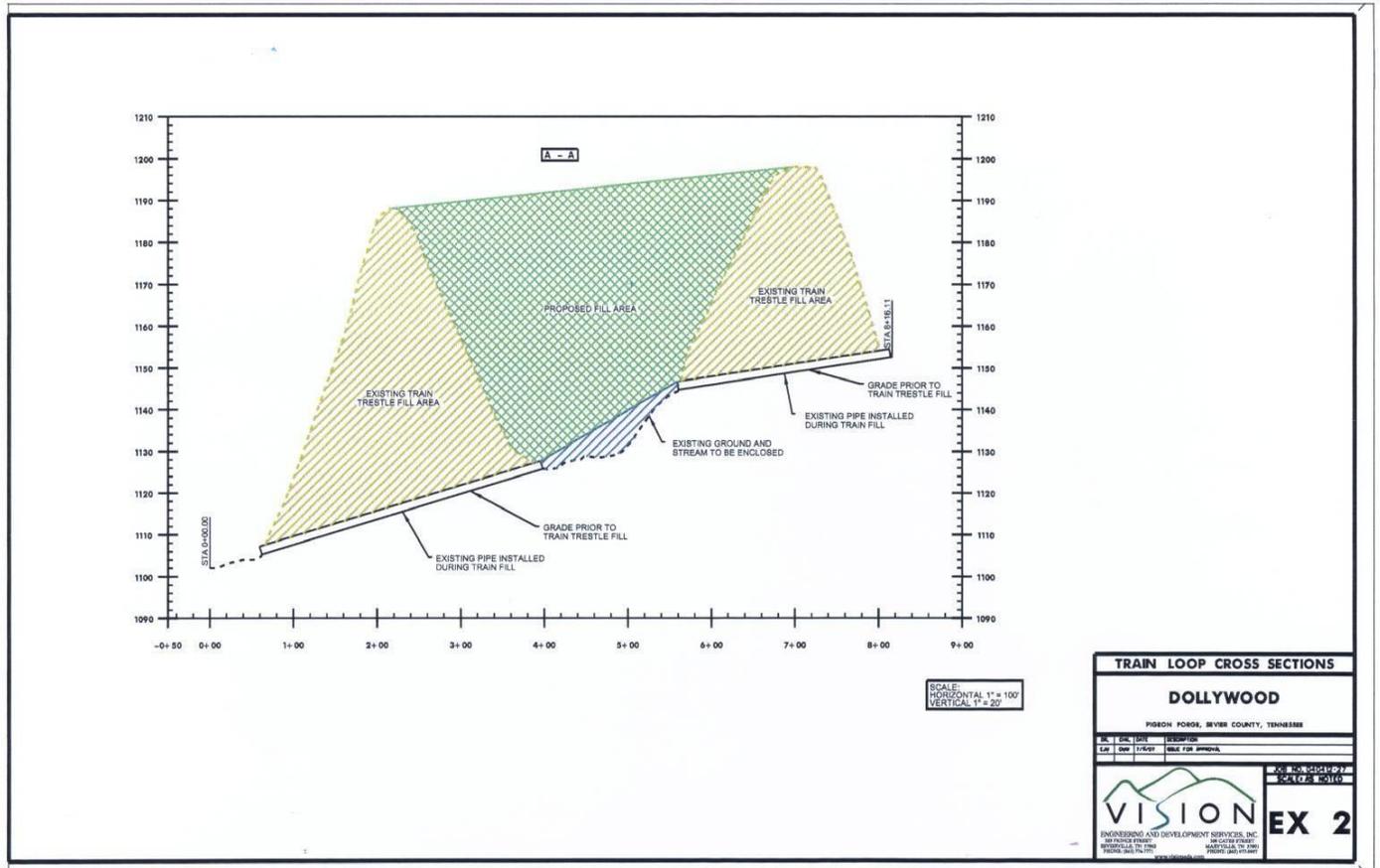
SOURCE: THIS DRAWING WAS ADAPTED FROM A TOPOGRAPHIC MAP PROVIDED BY VESION ENGINEERING AND DEVELOPMENT SERVICE, INC.

LEGEND	
	DITCHES AND ROCK CHECK DAM
	ENHANCED SILT FENCE
	TEMPORARY SEDIMENT TRAP

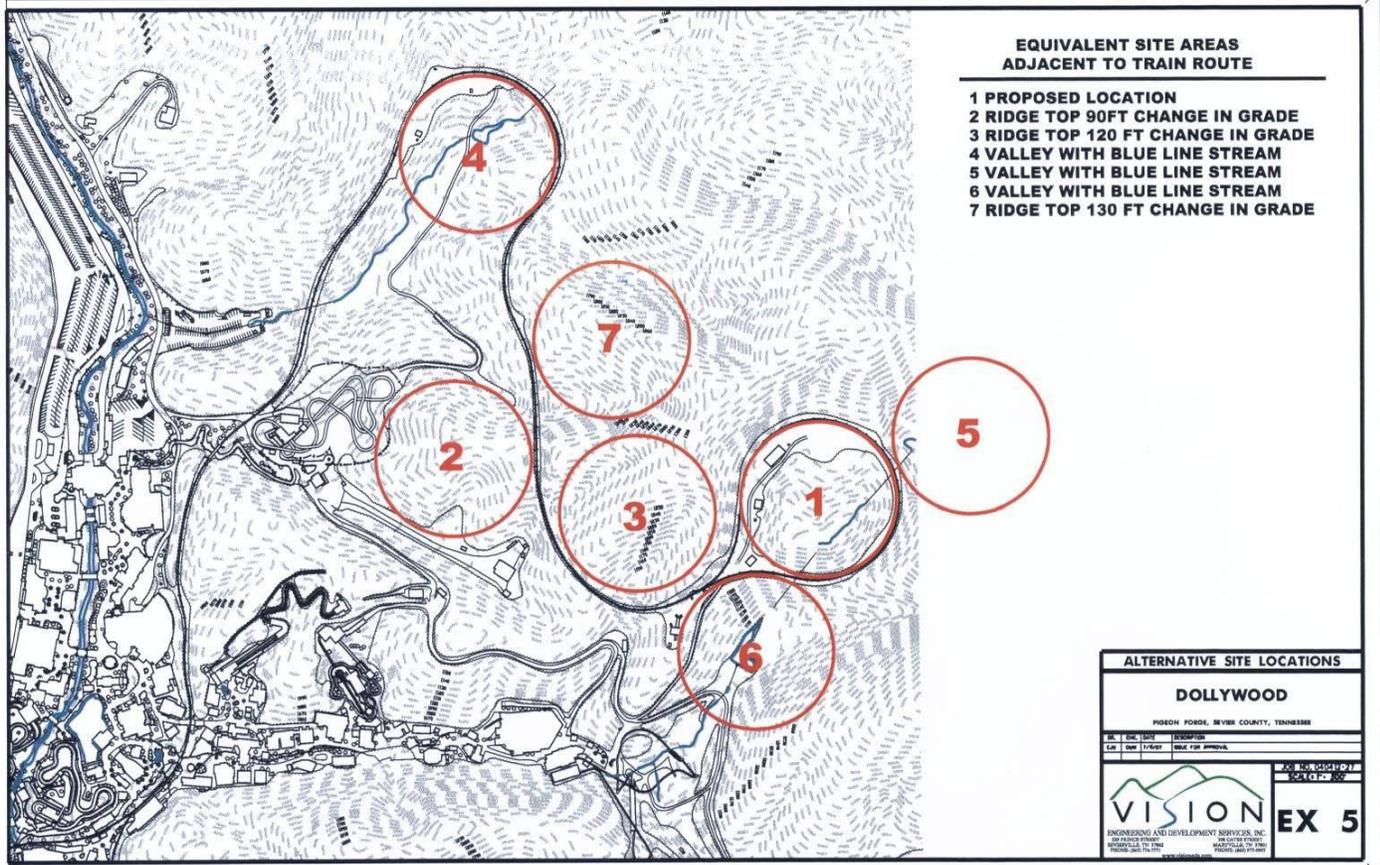
MACTEC
 MACTEC Engineering and Consulting, Inc.
 1723 Louisville Drive
 Knoxville, Tennessee 37921-9904
 865-588-8544 • Fax: 865-588-8026

FIGURE 3: EROSION CONTROL PLAN DOLLYWOOD TRAIN PROJECT PIGEON FORGE, TENNESSEE		
DRAFTING BY:	PREPARED BY:	CHECKED BY:
JOB NUMBER: 3079070022/0001	DATE: MAY 17, 2007	SCALE: 0 150'

COORDINATES: NAD 83 UTM 18Q UTM 18Q



Proposed Fill



Alternative Sites

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Dollywood Train Loop Project Addendum
MACTEC Project 3079-07-0044

July 11, 2007

- * Alternative analysis considered to the proposed development and alteration to the waters of the state. *
- This project was designed to create a new developable area that would be created by utilizing fill that was obtained by creating an on-grade connection between two existing wings of the park. Six other possible sites which met location and size constraints were investigated for creation of this developable area (EX 5).
 - Three of the sites (Sites 2, 3, and 7) are ridge tops with 90 to 130 feet of elevation change. Development of these areas would have created large quantities of fill in addition to the approximately 170,000 cubic yards of fill connection of two isolated wings of the existing park is creating. Only valleys could accommodate this amount of material.
 - Sites 4, 5, and 6 were considered. All three of these sites have free-flowing blue line streams in them and would require more stream impact than Site 1 and therefore were rejected.
 - Site 1 (preferred site) had been impacted prior to existing environmental regulations. Because of the existing impacts to this segment of the channel, creation of the developable area will be accomplished with minimal impacts to streams. The steep, man-made slopes (EX 2) which surround the stream in Site 1 created the optimum location to create a new developable area while utilizing the available fill from the on-grade connection phase of the project. Furthermore, the stream within Site 1 is intermittent and has normally non-flowing segments within the channel.

Description of construction methods (How do you propose to construct the new channel in the dry?):

- S-1 encapsulation will be accomplished by connecting similar sized reinforced concrete pipes (RCP) to the existing culverts at the northeast and southeast train loop crossings (see Figures 1 and 3). The current culverts are approximately 48 inches round on the upstream (northeast) end and 36 inch-by-60 inch oval on the downstream (southeast) end. Construction will be conducted in the dry by excavating a diversion channel, lining the channel with an impermeable liner held in place with riprap, and turning the existing stream through the diversion. The RCP will be installed and properly bedded connecting the two existing culverts. Because natural resource quality of S-1 is low, water flow is subsurface in certain locations during dry periods, encapsulation may enhance stream quality by increasing the amount of surface flow. Existing plan and cross sections are shown on sheets EX 1 through EX 3.

